

IN THE CLAIMS:

The status of each claim that has been introduced in the above-referenced application is identified in the ensuing listing of the claims. This listing of the claims replaces all previously submitted claims listings.

1. (Original) A method for fabricating a plasma probe, comprising:  
providing a substantially planar sacrificial substrate;  
forming a plurality of first conductive structures on said sacrificial substrate;  
providing a semiconductor substrate;  
forming a dielectric layer on said semiconductor substrate;  
forming a plurality of second conductive structures on said dielectric layer, each second conductive structure of said plurality of second conductive structures corresponding to a first conductive structure of said first plurality of conductive structures;  
securing a dielectric film over said plurality of second conductive structures;  
orienting said plurality of first conductive structures over corresponding ones of said plurality of second conductive structures, said plurality of first conductive structures and said plurality of second conductive structures both being secured to said dielectric film;  
removing said sacrificial substrate; and  
removing material of said dielectric film exposed between adjacent first conductive structures of said plurality of first conductive structures.

2. (Original) The method of claim 1, wherein said forming said plurality of second conductive structures comprises forming said plurality of second conductive structures such that distances therebetween approximate distances between features on a fabrication substrate to undergo substantially the same processing as that to be monitored with the plasma probe.

3. (Original) The method of claim 1, wherein said forming said plurality of second conductive structures comprises forming a plurality of sets of conductive structures, each of said plurality of sets being located at a different elevation than every other set of said plurality of sets

to facilitate generation of a three-dimensional representation of at least one characteristic of a plasma to be monitored.

4. (Original) The method of claim 3, wherein said forming said plurality of sets comprises forming conductive structures in each set of said plurality that correspond to and are in substantial alignment with conductive structures in every other set of said plurality.

5. (Original) The method of claim 4, wherein said forming said plurality of sets comprises forming every conductive structure of each set to be in substantially alignment with a corresponding conductive structure of every other set.

6. (Original) The method of claim 3, wherein said forming said plurality of sets comprises forming each of said plurality of sets at elevations, relative to a plane of said first plurality of conductive structures, which correspond substantially to heights of features on a fabrication substrate to undergo substantially the same processing as that to be monitored with the plasma probe.

7. (Original) The method of claim 1, further comprising electrically connecting selected first conductive structures of said plurality of first conductive structures to meters.

8. (Original) The method of claim 7, further comprising electrically connecting at least one second conductive structure of said plurality of second conductive structures to a second meter.

9. (Original) The method of claim 1, wherein said providing said sacrificial substrate comprises providing a sacrificial substrate comprising at least one of nylon and polystyrene.

10. (Original) The method of claim 1, wherein said removing said sacrificial substrate comprises exposing said sacrificial substrate to a degradative temperature.

11. (Original) The method of claim 1, wherein said removing said sacrificial substrate comprises exposing said sacrificial substrate to a solvent for a material thereof.

12. (Original) The method of claim 1, wherein said forming said plurality of first conductive structures comprises forming a conductive layer on a surface of said sacrificial substrate and patterning said conductive layer.

13. (Original) The method of claim 1, wherein said providing said semiconductor substrate comprises providing a semiconductor substrate of a same type as a semiconductor substrate upon which a material layer is to be formed using a plasma.

14. (Original) The method of claim 1, wherein said providing said semiconductor substrate comprises providing a silicon-on-insulator type substrate.

15. (Original) The method of claim 14, wherein said providing said silicon-on-insulator type substrate comprises providing at least one of a silicon-on-glass substrate, a silicon-on-sapphire substrate, and a silicon-on-ceramic substrate.

16. (Original) The method of claim 1, wherein said providing said semiconductor substrate comprises providing at least a partial wafer of semiconductive material.

17. (Original) The method of claim 16, wherein said providing said at least said partial wafer of semiconductive material comprises providing at least a partial wafer comprising at least one of silicon, gallium arsenide, and indium phosphide.

18. (Original) The method of claim 1, wherein said forming said dielectric layer comprises growing an oxide on a surface of said semiconductor substrate.

19. (Original) The method of claim 1, wherein said forming said dielectric layer comprises depositing dielectric material onto a surface of said semiconductor substrate.

20. (Original) The method of claim 1, wherein said forming said plurality of second conductive structures comprises:

forming a layer comprising conductive material on said dielectric layer; and patterning said layer comprising conductive material.

21. (Original) The method of claim 1, wherein said securing said dielectric film comprises securing a dielectric film comprising polyimide.

22. (Original) The method of claim 1, wherein said removing material of said dielectric film comprises exposing said dielectric film to at least one of a solvent and an etchant for a material thereof.

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